

REMARKS

Applicants thank Examiners Phan and Tugbang for the courtesy of the personal interview extended to the undersigned on November 17, 2005.

Claims 141, 142, 145 – 157, 232, 234, 235, 240, 242 and 243 are now pending in the application, with claims 142 and 149 – 157 having been withdrawn. The remaining claims have been canceled. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102 & § 103

Claim 141 stands rejected under 35 U.S.C. 102(b) based on Gstohl et al (US. 5,727,307). Claims 145 – 148, 232, 234, 235, 240, 242 and 243 stand rejected under 35 U.S.C. § 103(a) based on Gstohl et al.

Turning first to amended independent claim 141, it is directed to a method for forming a given size armature to increase the power of an electric motor using that given size armature. It recites, *inter alia*, molding plastic to at least partially encase the magnet wires in the plastic to hold them in place without using coils stays. As discussed in the interview, it also requires that winding the magnet wires in the slots of the lamination stack includes winding them so that they also occupy portions of the slots that are occupied by coil stays in an armature having the same size as the given size armature where coil stays are used to hold the magnet wires in place in the slots. In other words, when winding the magnet wires in the slots of the lamination stack of the given size armature, these magnet wires are wound in portions of the slots that are occupied by the coil stays in armatures that use coil stays. This allows more magnet

wire, either more turns or larger gauge wire, to be wound in the slots than in an armature where coil stays are used.

The recitation in claim 141 of “an armature having the same size as the given size armature where coil stays are used to hold the magnet wires in place in the slots of in place in the slots” is used as a point of comparison. That is, this recitation defines the portion of the slots where the magnet wires can be additionally wound by reference to an armature that utilizes coil stays.

During the interview, the Examiners expressed a concern about the phrasing of this limitation and whether it might be read as requiring the given size armature to have the coil stays. While applicants submit that this would not be an appropriate reading of this limitation, they have added new claim 250 in which the last limitation of claim 141 has been rephrased to read: “winding the magnet wires in the slots includes winding them so that they also occupy portions of the slots that are occupied by coil stays in an armature where coil stays are used to hold the magnet wires in place in the slots and where the armature in which the coil stays are used has the same size as the given size armature.” If the concern about this limitation in claim 141 remains but is addressed by its rephrasing in new claim 250, and new claim 250 is found to be allowable, applicant would amend the comparable limitations in the other independent claims, claims 232 and 240, so that they would read comparably to the limitation of new claim 250, and would cancel claim 141 and amend the claims dependent from new claim 141 so that they would depend from new claim 250.

Applicants submit that Gstohl fails to disclose or suggest the above limitations of claim 141 and new claim 250. While Gstohl et al. discloses molding plastic around the

magnet wires of the armature, it is silent about whether coil stays are used. More importantly, it makes no mention of winding the magnet wires in portions of the slots of the lamination stack that would otherwise be occupied by the coil stays. By winding the magnet wires in the portions of the slots that would otherwise be occupied by the coil stays, a larger volume of magnet wire can be wound in the slots. This allows the armature to be wound with the same number of turns of magnet wire but with larger diameter magnet wires. It also allows the armature to be wound with more turns of the same size armature wire. Applicants submit that claim 141 and new claim 250 are allowable over Gstohl et al.

Amended independent claim 232 is directed to method for making an electric motor with a given size armature to increase the power of the electric motor using that given size armature. Amended independent claim 240 is directed to a method for making a power tool having an electric motor with a given size armature to increase the power of the electric motor using that given size armature. They both include limitations comparable to those discussed with regard to independent claim 141 and are allowable over Gstohl et al. for at least the reasons discussed with respect to independent claim 141.

CONCLUSION

Applicants submit that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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